

10/1

Notice of Allowability	Application No.	Applicant(s)	
	09/415,201	SOME ET AL.	
	Examiner	Art Unit	
	Nhan T. Tran	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 12/22/2004.
2. ☒ The allowed claim(s) is/are 3,4 and 7-15.
3. ☒ The drawings filed on 22 December 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see amendment, filed 12/22/2004, with respect to claims 3, 4, 7-15 have been fully considered and are persuasive. The previous rejection has been withdrawn.

Allowable Subject Matter

2. Claims 3, 4, 7-15 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding independent claim 3, the prior art of record fails to teach or fairly suggest the combination of all limitations required in claim 3 that includes "...wherein the distortion aberration characteristic is expressed by a distortion ratio' $f(r)=(r'-r)/r$, where the distances from the optical axis on said image surface after correction of said position information are denoted by r , and said distances from the optical axis on said image surface before correction of said position information are denoted by r' ,

points of the image before the correction having coordinates (x', y') corresponding to predetermined points of the image after the correction having coordinates (x, y) are obtained based on equations,

$$x' = x \{1 + f(r)\}, \text{ and}$$

$$y' = y \{1 + f(r)\},$$

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where a position of the optical axis on the image surface is assumed to have coordinates (0, 0), and

values of said at least one kind of image information at the corresponding points of the image before the correction having the coordinates (x', y') are obtained, as values D' of said at least one kind of image information at said predetermined points of the image after the correction having the coordinates (x, y), based on a value or values of said at least one kind of image information at one or more image points having the coordinates (u, v) located near each of the corresponding points having the coordinates (x', y') on the image before the correction, where u and v are integers.”

Regarding claim 4, this claim directly depends from claim 3.

Regarding independent claim 7, the prior art of record also fails to teach or fairly suggest the combination of all limitations required in claim 7 that includes “...wherein the distortion aberration characteristic is expressed by a distortion ratio $f(r) = (r' - r) / r$, where the distances from the optical axis on said image surface after correction of said position information are denoted by r, and said distances from the optical axis on said image surface before correction of said position information are denoted by r',

said position correcting unit obtains points of the image before the correction having coordinates (x', y') corresponding to predetermined points of the image after the correction having coordinates (x, y), based on equations,

$$x' = x \{1 + f(r)\}, \text{ and}$$

$$y' = y \{1 + f(r)\},$$

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where a position of the optical axis on the image surface is assumed to have coordinates $(0, 0)$, and

said position-dependent information obtaining unit obtains, as a value D' of said at least one kind of image information at each of said predetermined points of the second image having the coordinates (x, y) , a value of said at least one kind of image information at a corresponding one of said points having the coordinates (x', y') , based on a value or values of said at least one kind of image information at one or more image points having the coordinates (u, v) located near said corresponding one of the points having the coordinates (x', y') in the first image, where u and v are integers.”

Regarding claims 8-15, these claims either directly or indirectly depend from claim 7.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.


TUAN HO
PRIMARY EXAMINER